

**AMENDMENT NO. 17 TO THE NASA RESEARCH ANNOUNCEMENT (NRA) ENTITLED
"RESEARCH OPPORTUNITIES IN SPACE AND EARTH SCIENCES (ROSES) 2005,"
NNH05ZDA001N, RELEASED JANUARY 28, 2005**

This amendment corrects the text for Appendix A.21: Living With a Star Targeted Research and Technology that was released as Amendment No. 14 to the ROSES-05 NRA on May 20, 2005. A missing paragraph has been restored to the document. The due dates remain unchanged. Notices of Intent to propose are due July 8, 2005, and proposals are due September 9, 2005.

The final paragraph of Section 1.2.3(e) was inadvertently left out when the final text was released for Appendix A.21: Living With a Star LWS) Targeted Research and Technology program as Amendment No. 14 to ROSES-2005 on May 20, 2005.

The following text is added as the final paragraph of Section 1.2.3(e) of ROSES-2005, Appendix A.14: Living With a Star (LWS) Targeted Research and Technology:

Types of solicited investigations: Both theoretical and experimental investigations are encouraged. Modeling of the existing thermosphere in comparison to the upper atmospheres of the other planets and also in terms of its response to varying amounts of greenhouse gases would be an integral activity of this focus group. Analysis of existing data or new observations of the thermal structure, composition and density distribution of the thermosphere and ionosphere could be used to help establish the baseline structure of the upper atmosphere and to look for the effects of global greenhouse warming. These investigations would need to be performed in the context of coupling to the lower atmosphere and strong solar forcing that will require quantification of the flux of energetic radiation and atomic particles from the Sun and their variation in response to short-term impulsive events and to the slower changes in background radiation that occur over the course of the solar cycle.

Further information about this program element is available from Dr. Madhulika Guhathakurta, Earth-Sun System Division, Science Mission Directorate, National Aeronautics and Space Administration, Washington, DC 20546-0001; Telephone: (202) 358-1992; E-mail: Madhulika.Guhathakurta@nasa.gov.